

invention. In this regard, and in the interest of brevity, Applicants hereby incorporate by reference in their entirety the remarks presented in the Rule 116 amendment filed October 23, 2001.

Furthermore, concerning the interpretation of Lauffer in the outstanding Action, it was noted therein that chip 112 is a bulk or conventional technology device with no insulation layer between the device and substrate. While Applicants do not traverse this interpretation of the reference, a careful examination of Fig. 4 of Lauffer and the associated description contained in the Lauffer specification will clearly reveal that the chip 112 referred to in the Action is in fact a high power density chip, whereas chip 115 is a low power logic or control chip. Thus, in accordance with the Examiner's own interpretation, in Lauffer it is the power chip which is directly mounted onto the conductive heat sink without an intervening or SOI layer, whereas the low-power chip is clearly shown as insulated from the substrate by a dielectric layer. In Applicants' claim 1, as previously amended, precisely the contrary construction is clearly recited, wherein the power semiconductor chip is an SOI device and the control semiconductor chip is a bulk

technology device with no insulating layer between a device layer and a substrate thereof, and with both chips being mounted directly on the electrically conductive heat sink. It is respectfully submitted that this argument further establishes that absent the benefit of impermissible hindsight derived from the instant application, the diverse teachings of the three cited and applied references neither show nor suggest the instant invention as presently claimed.

Furthermore, it is respectfully submitted that the novel and non-obvious concept of having the control chip directly connected to the conductive heat sink and having the power chip insulated therefrom by an SOI layer offers substantial commercial advantages, as noted in the instant specification. In particular, it is noted that this configuration, which is neither shown nor suggested in any of the cited and applied references, reduces EMI, permits the control circuits to be fabricated in a low-cost technology, and offers flexibility in high-voltage design, since the high-voltage power circuitry is electrically insulated from the heat sink.

In view of the foregoing, it is respectfully submitted that the currently-pending claims are clearly patentably distinguishable over the cited and applied references. Accordingly, allowance of

the currently-pending claims is now respectfully submitted to be justified, and favorable consideration is earnestly solicited.

Respectfully submitted,

By

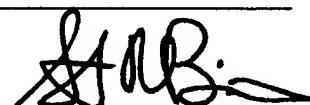
Steven R. Biren, Reg. No. 26,531  
Attorney  
(914) 333-9630

**CERTIFICATE OF MAILING**

It is hereby certified that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to:

COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

On 6/27/02  
(Date of Mailing)

By   
Steven R. Biren, Reg. No. 26,531